

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1. (Currently Amended) A data storing medium, comprising:

a digital data area in which one of encrypted digital data and non encrypted digital data is written;

a control data area in which control data necessary for reproducing recorded digital data is written; and

a plurality of copyright control information areas in which is written the same copyright control information necessary for decrypting the encrypted digital data,

wherein said plurality of copyright control information areas are spaced apart by a predetermined interval,

wherein said plurality of copyright control information areas are embossed so as to be write prohibited, and

wherein said control data area is write permitted,

wherein, data written to the area for the copyright control information is converted so that the data is not corrected by an error correcting process performed when the encrypted digital data is reproduced, and

wherein a data converting process converting the copyright control information is a process that satisfies a relation of  $2a + b > d$  where "a" is a number of lines that are

not erased as an error of the copyright control information,  
"b" is a number of lines that are erased thereof, and "d" is a  
minimum distance of the error correction code.

Claim 2. (Previously Presented) The data storing medium  
as set forth in claim 1,

wherein an entire sector containing the control data area  
for the control data is write permitted.

Claim 3. (Previously Presented) The data storing medium  
as set forth in claim 1,

wherein an entire sector containing the copyright control  
information area for the copyright control is write  
prohibited.

Claim 4. (Previously Presented) The data storing medium  
as set forth in claim 1,

wherein the storing medium is a recordable medium.

Claim 5. (Cancelled)

Claim 6. (Original) The data storing medium as set forth  
in claim 1,

wherein data that is different from the copyright control

information and that is not detected as an error with error correction code is recorded.

Claim 7. (Cancelled)

Claim 8. (Canceled)

Claim 9. (Previously Presented) The data storing medium as set forth in claim 1, wherein the data written in the digital data area has been modulated corresponding to 8-16 modulating method.

Claim 10. (Previously Presented) A data recording apparatus for writing encrypted digital data to a data storing medium, comprising:

means for writing the encrypted digital data and copyright control information for decrypting the encrypted digital data to the data storing medium so that when the encrypted digital data is reproduced the copyright control information is not obtained by recording dummy information in a sector of the data storing medium, so as to form a write-prohibited area containing the copyright control information; and

means for encoding the copyright control information with

an error correcting code,

wherein, data written to the area for the copyright control information is converted so that the data is not corrected by an error correcting process performed when the encrypted digital data is reproduced, and

wherein a data converting process converting the copyright control information is a process that satisfies a relation of  $2a + b > d$  where "a" is a number of lines that are not erased as an error of the copyright control information, "b" is a number of lines that are erased thereof, and "d" is a minimum distance of the error correction code.

Claim 11. (Cancelled)

Claim 12. (Canceled)

Claim 13. (Previously Presented) The data recording apparatus as set forth in claim 10,

wherein the error correcting process is an error detecting and correcting process.

Claim 14. (Previously Presented) The data recording apparatus as set forth in claim 10,

wherein the error correcting process is an error

erasing and correcting process.

Claim 15. (Previously Presented) The data recording apparatus as set forth in claim 10,

wherein a data converting process converting the copyright control information is a process for exclusively ORing the copyright control information and different data, encoding the resultant data with error detection and/or correction code, and removing the different data.

Claim 16. (Canceled)

Claim 17. (Previously Presented) The data recording apparatus as set forth in claim 10,

wherein the encrypted digital data has been modulated corresponding to an 8-16 modulating method.

Claims 18-34. (Canceled)

Claim 35. (Previously Presented) A data writing method for a data storing medium having a first area in which digital data is written and a second area in which control data necessary for reproducing the data from the first area is written, the data writing method comprising the step of:

writing the control data to the second area in such a manner that part of the control data is not reproduced,

wherein the control data written in the second area contains copyright control data about the digital data written in the first area, and

causing the copyright control data to be written in the second area in such a manner that the copyright control data is reproduction-prohibited

wherein the copyright control data includes an error correction code and is converted in such a manner that a relation of  $2a + b > d$  is satisfied where "a" is a number of lines that are not erased as an error of the copyright control data, "b" is a number of lines that are erased thereof, and "d" is a minimum distance of the error correction code.

Claim 36. (Canceled)

Claim 37. (Original) The data writing method as set forth in claim 35,

wherein the copyright control information is reproduction-prohibited by exclusively ORing the copyright control information and different data, encoding the resultant data with error detection and/or correction code, and removing the different data.

Claim 38. (Previously Presented) A data writing method for a data storing medium having a first area in which digital data is written and a second area in which different data is written that is to be read before the digital data is read when the digital data is reproduced, the data writing method comprising the steps of:

converting the different data in such a manner that the different data is not corrected by an error correcting process; and

writing the different data to the second area in such a manner that part of the different data is not reproduced

wherein the different data is converted in such a manner that a relation of  $2a + b > d$  is satisfied where "a" is a number of lines that are not erased as an error of the different data, "b" is a number of lines that are erased thereof, and "d" is a minimum distance of a error correction code used in the error correcting process.

Claim 39. (Original) The data writing method as set forth in claim 38,

wherein the different data is written to the second area in such a manner that the different data is reproduction-prohibited.

Claim 40. (Cancelled)

Claim 41. (Canceled)

Claim 42. (Previously Presented) The data writing method as set forth in claim 38,

wherein the different data comprises copyright control information and is converted by exclusively ORing the copyright control information and false data, encoding resultant data with an error detection and/or correction code, and removing the false data.

Claim 43. (Original) The data writing method as set forth in claim 38,

wherein the digital data written to the first area is encrypted data.

Claim 44. (Original) The data writing method as set forth in claim 38,

wherein the different data that is written to the second area is data containing copyright control data about the digital data that is written to the first area.



Claim 45. (Previously Presented) A data writing apparatus having a data storing medium having a first area in which digital data is written and a second area in which control data necessary for reproducing the data from the first area is written, the data writing apparatus comprising:

a writing portion for writing data to the data storing medium; and

a data processing portion for supplying data to said writing portion in such a manner that a part of the control data comprising copyright control data is reproduction-prohibited,

wherein said data processing portion converts the copyright control data of the control data in such a manner that the copyright control data is not corrected by an error correcting process,

wherein said data processing portion converts the copyright control data in such a manner that a relation of  $2a + b > d$  is satisfied, where "a" is a number of lines that are not erased as an error of the copyright control data, "b" is a number of lines that are erased thereof, and "d" is a minimum distance of an error correction code used in the error correcting process.

Claim 46. (Cancelled)

Claim 47. (Canceled)

Claim 48. (Previously Presented) The data writing apparatus as set forth in claim 45,

wherein said data processing portion exclusively OR's the copyright control information and different data, encodes the resultant data with error detection and/or correction code, and removes the different data.

Claim 49. (Previously Presented) A data writing apparatus for a data storing medium having a first area in which digital data is written and a second area in which different data that is read before the digital data is read from the first area when the digital data is reproduced from the first area, the data writing apparatus comprising:

a writing portion for writing data to the data storing medium; and

a data processing portion for supplying data to said writing portion in such a manner that at least part of the different data comprising copyright control data is reproduction-prohibited,

wherein said data processing portion converts the different data in such a manner that the different data is not

corrected by an error correcting process, and

wherein said data processing portion converts the copyright control data in such a manner that a relation of  $2a + b > d$  is satisfied where "a" is a number of lines that are not erased as an error of the copyright control data, "b" is a number of lines that are erased thereof, and "d" is a minimum distance of a error correction code that is used in the error correcting process.

Claim 50. and 51. (Cancelled)

Claim 52. (Previously Presented) The data writing apparatus as set forth in claim 49,

wherein said data processing portion exclusively OR's the different data and other data, encodes the calculated result with error detection and/or correction code, and performs a process for removing the other data from the encoded data.

Claims 53-61. (Canceled)